

# Why IPv6 Support by Domain Registrars is Important

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And lucrative?



# Overview

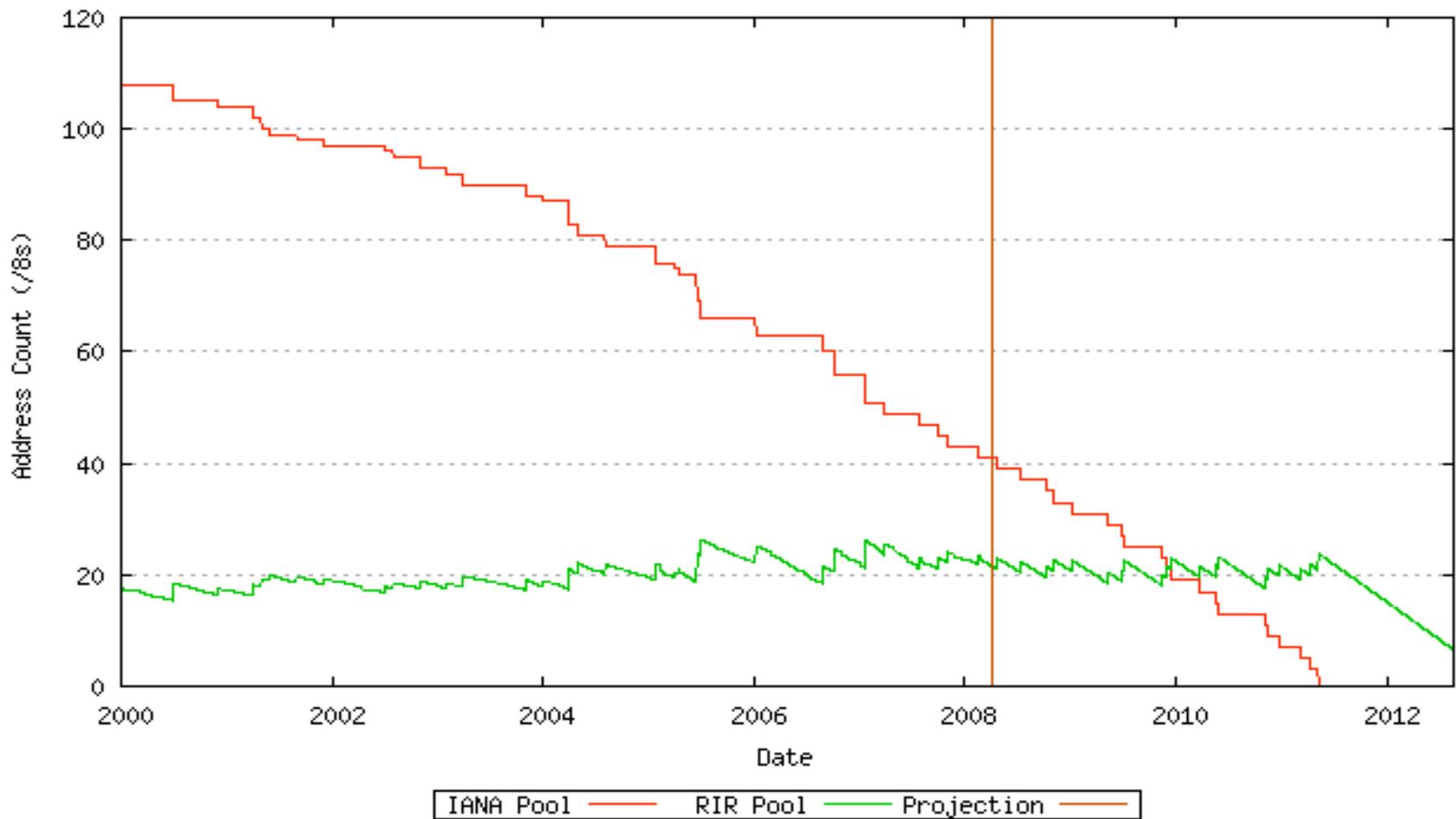
- ▶ Timeline
- ▶ Market Growth
- ▶ Technical Need

# Timeline



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# When do we run out of IPv4?



Q2 2011

*IANA Free  
Pool Empty*

Q3 2012

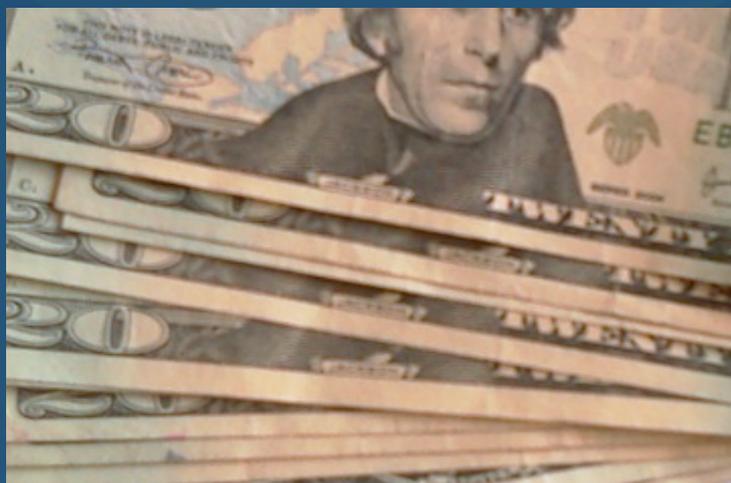
*RIR Free  
Pools Empty*

Putting it in words



# And then we're out?

- ▶ Unused IPv4 space at ISPs
- ▶ Unused IPv4 space on customers' networks
- ▶ But... expensive



# Market Growth



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In contrast to the IPv4 pools



# Count the people connect

- ▶ 1 billion connected by start of 2007
  - ▶ Rapid growth
  - ▶ Demand for domain registration
  - ▶ Demand for low registration charges



# An unfortunate mismatch

- ▶ Anyone connecting from 2011 onwards
  - ▶ Will want to join the big, big network
  - ▶ Will find IPv4 more expensive, or
  - ▶ Won't have an IPv4 option available
  
- ▶ But will want to register and use domains

# Technical Need



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# IPv6 and domain registration



- ▶ IPv4 glue? You'll need IPv6 too.
- ▶ Registrars will need to support
  - ▶ IPv6 in DNS
  - ▶ User management interfaces
  - ▶ User support

# Alternatives to registrar support

*Official*

- ▶ Switch registrar
- ▶ Personal support by engineering staff
- ▶ Switch to a ccTLD



# Alternatives to IPv6?

- ▶ High density NAT can support large client bases, but...
- ▶ It doesn't scale well when apps open dozens or hundreds of simultaneous connections
- ▶ NAT cannot support large server deployments

# References

- ▶ Geoff Huston's IPv4 Address Report
  - ▶ <http://www.potaroo.net/tools/ipv4/index.html>
- ▶ Takashi Arano's IPv4 Exhaustion Gadget
  - ▶ <http://entne.jp/tool/toollist/000101.php>
- ▶ Sixxs' list of registrars supporting IPv6 glue
  - ▶ <http://www.sixxs.net/faq/dns/?faq=ipv6glue>



Thank You!



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